

## *Researchers Find Another Clue in the Dyatlov Pass Mystery*

By Alan Yuhas

April 1, 2022 Updated 12:01 p.m. ET

The mystery of nine hikers who died in Russia has baffled people for more than 60 years. The authors of a recent paper think they've found another clue.



Hikers on the expedition into the Dyatlov Pass. Nine people disappeared in February 1959, and no one knows exactly what happened to them.

A small avalanche on a desolate Russian mountain, harming no one and quickly erased by the relentless wind, does not usually make news.

Unless it happens close to where nine Russian hikers died in the Urals more than 60 years ago, in a mystery [that has confounded investigators](#) and inspired conspiracy theories about corruption and spies, rocket programs and forest monsters, romantic rivalries and U.F.O.s.

Those theories have filled books, documentaries and TV shows, drawing on the uncanny details of archival documents, photos and research about what happened to Igor Dyatlov and his friends in 1959, their bodies scattered, injured and in states of undress.

A recent Russian government investigation, opened in 2019 and aimed at finally resolving the mystery, concluded that an avalanche drove the hikers out from their tent into deadly conditions. But researchers had never documented an avalanche in the area where the camp was found, now called the Dyatlov Pass. The terrain seemed too gentle, and the details too strange.

“As far as I know, no one has ever seen one on these mountains,” Valery Anyamov, a representative of the Indigenous Mansi people who live in the region, said in a new documentary, [“The Dyatlov Mystery.”](#)

Last year, two Swiss scientists published a peer-reviewed study showing that [an unusual delayed avalanche could have crushed the hikers' camp](#). Now, they have published the first record of a slab avalanche in the area, along with a 3-D map taken by drone.

The scientists remained cautious about the limits of their research, saying much was still unknown. But the new research offers another piece in the puzzle.

“All we can say is that there was a serious avalanche danger,” said one of the scientists, Alexander Puzrin, a professor of geotechnical engineering at ETH Zurich, a research university. “We do not know what happened out there, even if it was an avalanche.”

His co-author, Johan Gaume of the Snow and Avalanche Simulation Laboratory at the École Polytechnique Fédérale de Lausanne, said open questions remained about “everything that happened after” the initial disaster, including why bodies were found hundreds of yards from their tent.

Mr. Puzrin said criticism of their earlier study — including questions about whether slopes were steep enough for an avalanche, and the absence of avalanche evidence — had motivated him to keep digging for data. He learned that their model fit with wind and snow observations made, independently, by Russian scientists who were part of the 2019 inquiry. Before long he found himself coordinating with guides in the Urals.

“One thing I didn’t want to do was to become a part of the Dyatlov mystery community who spend their entire life on this,” he said. “But somehow it just captivates you, and that’s it.”

Over the last year, he and Mr. Gaume organized three expeditions.



The hikers' tent was discovered ripped.

For one of the trips, they had Victor Popovnin, an avalanche scientist at Moscow State University, fly a drone over the area to create a 3-D map of its stepped terrain. Avalanches do not generally occur at angles less than 30 degrees — with exceptions — and the drone map showed many steps were close to or exceeded 30 degrees.

“Regardless of where you pitch the tent there will be slopes steeper than 30 degrees,” Mr. Gaume said.

Another expedition reached the pass in January, almost exactly 63 years after the hikers died, and encountered brutal weather: lashing

winds, severe snow drifts and temperatures sinking to negative 25 degrees Celsius, making it difficult even to operate a camera. But the team was able to record traces of a slab avalanche, which the wind made “practically invisible” after less than an hour.

“The conditions up there are truly horrendous,” said Matteo Born, a Swiss filmmaker who traveled to the pass twice in the last year, once in winter and again in the summer, for the documentary.

He said that, knowing the history of the site, he felt “kind of a macabre atmosphere” in the pass, which takes days to reach from the town of Ivdel, itself a day’s train ride from the city of Yekaterinburg. “You are completely alone up there.”

Mr. Born said he was “really excited” about the documented evidence of an avalanche, but said that mysteries would always remain about the case. “At some point with this Dyatlov mystery,” he said, “you have to be open-minded about the fact that there are some things you will never understand.”

Mr. Gaume said the winds helped explain why no avalanche had been documented in the area before, even though Indigenous people, the Mansi, live in the region. “These avalanches, they release in conditions where people don’t go out because it’s so windy, so stormy, and then hours later the wind has covered the traces,” he said.

The hikers’ tent was discovered ripped.

Mr. Puzrin and Mr. Gaume’s [latest article](#), published in the journal *Communications Earth & Environment*, is not peer-reviewed. And two avalanche experts who were not involved with it, Karl Birkeland and Doug Chabot, expressed skepticism, saying that although the Swiss scientists had shown how one could have happened, it still seemed unlikely.

“We believe that the avalanche hypothesis cannot be completely ruled out, but that it is not the most likely scenario,” said Mr. Birkeland, the director of the U.S. Forest Service’s National Avalanche Center. “While it may be remotely possible, we would suggest that it would be highly improbable.”

He and Mr. Chabot, the director of the Gallatin National Forest Avalanche Center in Montana, said that evidence of an avalanche near the tent location “does not really have any relevance,” because safe terrain could directly abut dangerous conditions.

They also expressed concern about whether the terrain was steep enough. Despite the 3-D mapping, they believe the slopes shown in old photographs “are not sufficiently steep for an avalanche,” Mr. Birkeland said.

Teddy Hadjiyska, who runs [a website dedicated to the Dyatlov incident](#), said Mr. Puzrin and Mr. Gaume were “good scientists and made their point.”

“An avalanche can happen on the Dyatlov Pass,” Ms. Hadjiyska said.

But she said the new data changed nothing in [her analysis](#), noting issues such as the 1959 rescue team’s finding no trace of an avalanche,

photos of “orderly” footprints from the tent and the severity of the injuries. “The case files unambiguously show that there was no avalanche,” she said.

She added that the scientists were “not solving the case,” but only “writing a scientific paper about avalanches on Dyatlov Pass.”

Mr. Chabot, who has helped recover victims from high mountain environments, said that an avalanche at a 30-degree slope could happen, but would be “super, super rare.”

He suggested another theory: The wind and drifting snow could have collapsed part of the tent, forcing the hikers outside to avoid suffocation.

Small decisions, like shovels or boots left in the wrong place, could lead to a domino effect, putting people in “absolutely horrific” conditions.

“Everything becomes life-threatening in a matter of seconds, and once people get out of the tent to survive, you get sucked into the elements,” he said.

Desperation, he said, could have led to circumstances that appeared bizarre to investigators. “You do things, or things happen to you, that cannot necessarily be explained in a normal situation,” he said.